

Revised : Statistical Analysis Using MS Excel
(Unique Subject Code – PCC2E10)
M.Com. Sem II

Theory : 80 Marks

Time: 3 Hours

Practical /Internal Assessment : 20

Learning Objectives: To explore the use of various statistical tools, to understand the Descriptive statistics, Computation of Statistics by using Microsoft Excel.

Unit:1 Introduction to Business Statistics **15 Lectures**

1. Introduction to Statistics
2. Functions of Statistics
 - a. Various Function of Statistics
 - b. Scope of Statistics
 - c. Specific Application of Statistics in Different Areas
3. Collection of Data
 - a. The sources of data to be collected for various purposes
 - b. Methods of Collection of Data
 - c. Various Tools to be used in collection of Primary Data
 - d. The Designing of Questionnaire
4. Presentation of Data
 - a. Classification of Data
 - b. Type of classification of Data
 - c. Collection and Preparation of Tally Bars
 - d. Class Interval and Limits of Class Intervals

Unit:2 Tabulation, Chart and Graphs **15 Lectures**

1. Tabulation of Data
 - a. Types of Table and Parts of Table
 - b. Formats of Table
 - c. Preparation of Table with Examples
2. Charting of Data
 - a. Meaning of Graphs
 - b. General Rules of preparing Graphs
 - c. Different types of Graphs
 - d. Preparation of various Diagram using the Data
3. Introduction to Microsoft Excel
 - a. What is excel application and its different components
 - b. Introducing Various Tools on Microsoft Excel
 - c. Introducing various Tab and Manus available on Microsoft Excel
4. Graphs In Microsoft Excel
 - a. How to insert graphs using Microsoft Excel sheet
 - b. Meaning and Types of Charts
 - c. Insertion of Graph Using Microsoft Excel
 - d. Various types of tab to be used while inserting the Graphs

Unit:3 Descriptive Statistics and its application **15 Lectures**

1. Measures of Central Tendency-, Mean
 - a. Introduction to Measures of Central Tendency & Uses

- b. Meaning, Advantages and Disadvantages of Arithmetic Mean
 - c. Computation of Arithmetic Mean under Ungrouped Data
 - d. Computation of Arithmetic Mean under Grouped Data
 - e. Computation of Arithmetic Mean using Microsoft Excel
2. Median - Meaning And Computation
 - a. Meaning of Median and its computation
 - b. Computation of median of ungrouped and grouped data
 - c. Computation of Median Using Microsoft Excel
 3. Mode- Meaning And Computation
 - a. Meaning and Characteristics of Mode
 - b. Advantages and Disadvantages of Mode
 - c. Computation of Mode Using formula
 - d. Computation of Mode using Microsoft Excel
 4. Weighted Average Mean
 - a. Meaning and Characteristics of Weighted Arithmetic Mean
 - b. Advantages of Weighted Arithmetic Mean
 - c. Uses of Weighted Arithmetic Mean
 - d. Computation of Weighted Arithmetic Mean
 - e. Computation of Weighted Arithmetic Mean Using Microsoft Excel

Unit:4 Descriptive Statistics its Application

15 Lectures

1. Geometric Mean And Harmonic Mean
 - a. Meaning of Geometric Mean
 - b. Computation of Geometric Mean and Harmonic Mean
 - c. Computation of Geometric Mean and Harmonic Mean Using Microsoft Excel
2. Measures of Dispersion
 - a. Meaning and Definition of Measures of Dispersion
 - b. Various Characteristics of Measures of Dispersion
 - c. Importance of Measures of Dispersion
 - d. Advantages and Disadvantages of Measures of Dispersion
 - e. Application and practical problems of Measures of Dispersion
3. Types of Dispersion
 - a. Rang and application of Rang
 - b. Quartile Deviation
 - c. Mean Deviation
 - d. Merits and Demerits of Mean Deviation
 - e. Computation of Mean Deviation
4. Standard Deviation
 - a. Meaning and Characteristics of Standard Deviation
 - b. Computation of Standard Deviation for ungrouped and grouped Data
 - c. Merits and Demerits of Standard Deviation
 - d. Computation of Standard Deviation Using Microsoft Excel

Books and References

1. *Fundamentals of Statistics*: D. N. Elhance, Veena Elhance and B. M. Aggarwal
2. *Statistical Methods*: S. P Gupta.
3. *Fundamentals of Statistics*: S.C Gupta
4. *Practical Statistics*: R S N Pillai and Bhagavathi
5. *Statistics (Theory, Methods and Application)*: D.C. Sancheti and V.K. Kapoor

**REVISED QUESTION PAPER PATTERN
OF
STATISTICAL ANALYSIS USING MS EXCEL**

Q.1 Theory Questions 16 marks

1. Theory Question for 4 marks from unit 1
2. Theory Question for 4 marks from unit 2
3. Theory Question for 4 marks from unit 3
4. Theory Question for 4 marks from unit 4

Q.2 Practical Questions 16 marks

1. Practical Question for 8 marks
 2. Practical Question for 8 marks
- OR
3. Practical Question for 8 marks
 4. Practical Question for 8 marks

Q.3 Practical Questions 16 marks

1. Practical Question for 8 marks
 2. Practical Question for 8 marks
- OR
3. Practical Question for 8 marks
 4. Practical Question for 8 marks

Q.4 Practical Questions 16 marks

1. Practical Question for 8 marks
 2. Practical Question for 8 marks
- OR
3. Practical Question for 8 marks
 4. Practical Question for 8 marks

Q.5 Practical Questions 16 marks

1. Practical Question for 8 marks
 2. Practical Question for 8 marks
- OR
3. Practical Question for 8 marks
 4. Practical Question for 8 marks